

(a) applying the blood pressure measurement mechanism and the limb orientation sensing unit to an individual's limb to detect a presence of blood pressure in the limb, to detect at least one of an actual orientation and an actual position of the limb, and to automatically trigger the timing mechanism; and

(b) the limb orientation sensing unit configured to sense at least one of a correct orientation and a correct position of the limb, and, in response thereto, delivering an electrical signal to the blood pressure measurement mechanism; and

(c) the blood pressure measurement mechanism automatically measuring blood pressure in response to the electrical signal; or,

(d) upon the timing mechanism measuring a passage of a predetermined amount of time, the timing mechanism automatically causing the blood pressure measurement mechanism to measure blood pressure.

17. The method of claim 16 wherein the apparatus includes a display mechanism coupled to the limb orientation sensing unit, the method further comprising the step of displaying a visual indication that guides the individual to place the limb in at least one of the correct orientation and the correct position.

18. The method of claim 17 wherein the display mechanism is also coupled to the blood pressure measurement mechanism, the method further comprising the step of displaying at least one of blood pressure and pulse.

19. The method of claim 17 further including the steps of:

the limb orientation sensing unit monitoring displacement of the limb during the step of blood pressure measurement, and

displaying an error message if the limb is displaced during the step of measuring blood pressure.

20. The method of claim 17, further comprising the step of correcting the measured blood pressure in response to at least one of an actual orientation and an actual position of the individual's limb, wherein, respectively, the actual orientation is not the correct orientation and/or the actual position is not the correct position.

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21. The method of claim 16, further comprising the steps of providing a motion sensor, sensing motion of the individual's limb while the blood pressure is being measured, and correcting the measured blood pressure in response to the sensed motion.

22. The method of claim 17, wherein the visual indication is indicative of whether at least one of the sensed limb orientation and the sensed limb position is in a correct angular range of the limb from which a blood pressure measurement is taken, such that the visual indication causes the user, by interaction, to adopt an orientation and/or a position within the correct angular range for measurement.

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23. An apparatus including:

- (a) a limb orientation sensing unit;
- (b) a blood pressure measurement mechanism; and
- (c) a time measurement mechanism;

wherein the time measurement mechanism is coupled to the blood pressure measurement mechanism and the limb orientation sensing unit;

wherein, upon the apparatus being applied to an individual's limb, the blood pressure measurement mechanism detects blood pressure prevailing in the limb, the limb orientation sensing unit senses at least one of a position and an orientation of the limb, and the timing mechanism is automatically triggered;

wherein the limb orientation sensing unit is configured to sense at least one of a correct orientation and a correct position of the limb, and, in response thereto, deliver an electrical signal to the blood pressure measurement mechanism;

wherein the blood pressure measurement mechanism automatically measures blood pressure in response to the electrical signal; and

wherein, upon the timing mechanism measuring a passage of a predetermined amount of time, automatically causing the blood pressure measurement mechanism to measure blood pressure.

24. The apparatus of claim 23 further comprising a display mechanism, coupled to the limb orientation sensing unit, for displaying a visual indication that guides the individual to place the limb in at least one of the correct orientation and the correct position.

25. The apparatus of claim 24 wherein the display mechanism is also coupled to the blood pressure measurement mechanism, and wherein the display mechanism displays at least one of blood pressure and pulse.

Sub 23  
26. The apparatus of claim 24 wherein the limb orientation sensing unit monitors displacement of the limb during the step of blood pressure measurement, and the display mechanism displays an error message if the limb is displaced during a blood pressure measurement.

27. The apparatus of claim 24, wherein the blood pressure measurement mechanism corrects measured blood pressure in response to at least one of an actual orientation and an actual position of the individual's limb as measured by the limb orientation sensing unit, wherein, respectively, the actual orientation is not the correct orientation, and/or the actual position is not the correct position.

28. The apparatus of claim 23, further including a motion sensor for detecting motion of the individual's limb while blood pressure is being measured by the blood pressure measurement mechanism, and for correcting the measured blood pressure in response to the sensed motion.

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29. The apparatus of claim 24, wherein the visual indication is indicative of whether at least one of the sensed limb position and the sensed limb orientation is in a

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correct angular range of the limb from which a blood pressure measurement is taken, such that the visual indication causes the user, by interaction, to adopt at least one of a position and an orientation within the correct angular range.

30. The apparatus of claim 24, further comprising a data storage device for storing reference data.

31. The apparatus of claim 24, wherein the blood pressure measurement mechanism is positioned within a unit constructed to fit an individual's wrist.

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32. The apparatus of claim 24, wherein the display mechanism provides an indication in the form of two arrows pointing in opposite directions, and one of the arrows is illuminated to indicate a direction by which at least one of a limb position correction may be performed if the limb is not in the correct position, and a limb orientation correction may be performed if the limb is not in the correct orientation.

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33. The apparatus of claim 32, further comprising a measurement value storage device for determining validity of a blood pressure measurement taken by the blood pressure measurement mechanism, wherein the display mechanism is further equipped with an error readout display for indicating any of a plurality of improper measurement conditions, including at least one of an incorrect measurement position, an incorrect measurement orientation, an incorrect measurement inclination angle, and limb movement taking place during the blood pressure measurement.

34. The apparatus of claim 33 wherein the error readout of the display mechanism is activated during the blood pressure measurement.

Sub 16  
35. The apparatus of claim 34 wherein the error readout of the display is activated after the blood pressure measurement.

36. The apparatus of claim 23 further comprising an error flag mechanism, wherein the display mechanism is not continuously activated during blood pressure measurement;

wherein the limb orientation sensing unit is continuously activated during